

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.
23-R-0023

CUSTOMER NO.
309

FORM APPROVED
OMB NO 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY
(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

UNIVERSITY OF PENNSYLVANIA
(b)(6), (b)(7)c
(b)(2) High, (b)(7) MAIL CODE 6303
PHILADELPHIA, PA 19104
(215) 896-7236

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS(sites)

See Attached Listing

DEC 01 2006

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS FORM 7023A)

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain- relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs	0	1	1069	0	1070
5. Cats	53	20	440	0	460
6. Guinea Pigs	0	32	179	14	225
7. Hamsters	0	0	0	0	0
8. Rabbits	0	77	116	0	193
9. Non-Human Primates	0	2	76	0	78
10. Sheep	0	7	230	0	237
11. Pigs	0	2583	499	0	3082
12. Other Farm Animals					
13. Other Animals					

ASSURANCE STATEMENTS

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL
(Chief Executive Officer or Legally Responsible Institutional official)
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

b6,b7c

DATE SIGNED

11/30/2006

APHIS FORM 7023
(AUG 91)

(Replaces VS FORM 19-23 (Oct 88), which is obsolete)

PART 1 - HEADQUARTERS

Q9w

FORM APPROVED
OMB NO. 0579-0036

UNIVERSITY OF PENNSYLVANIA
(b)(6), (b)(7)c
(b)(2)High, (b)(7)f MAIL CODE 6303
PHILADELPHIA, PA 19104
(215) 898-7236

DEC 01 2006

[illegible]

ASSURANCE STATEMENTS

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). **A summary of all the exceptions is attached to this annual report.** In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

✓ I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

b6,b7c

DATE SIGNED

11/30/2006

(AUG 91)

PART I - HEADQUARTERS

Column E Explanation

This form is intended as an aid to completing the Column E explanation. It is not an official form and its use is voluntary. Names, addresses, protocols, veterinary care programs, and the like, are not required as part of an explanation. A Column E explanation must be written so as to be understood by lay persons as well as scientists.

1. Registration Number: 23-R-0023

2. Number 14 of animals used in this study.

3. Species (common name) Guinea pigs of animals used in this study.

4. Explain the procedure producing pain and/or distress.

Dunkin-hartley guinea pigs develop spontaneous osteoarthritis with age. The purpose of this study was to correlate the severity of arthritic lesions as visualized on MRI with clinical observations and terminal biochemical cartilage measurements to determine the degree of correlation. Groups of guinea pigs were observed for clinical signs of arthritis as they age, were be imaged multiple times using MRI under general anesthesia and were humanely euthanatized using an IV overdose of potassium chloride under general anesthesia. General anesthesia is necessary for MRI to prevent animal movement during imaging. After euthanasia, cartilage was collected and biochemical techniques were used to test the cartilage. The arthritis in these guinea pigs develops spontaneously and any signs of stiffness or lameness could not be treated because this would alter clinical observations and measurements of the biochemical content of the cartilage specimens. If any guinea pig became inappetent or reluctant to move due to progressive arthritis, it was euthanatized to prevent any further discomfort.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see Item 6 below.)

The PI has done comprehensive literature searches with each approval and re-approval of the protocol and has determined that treatment for arthritis, which is chronic and slowly progressive, is likely to both alter clinical observations and to alter biochemical measurement.

6. What, if any, federal regulations require this procedure? Cite the agency, the code of Federal Regulations (CFR) title number and the specific section number (e.g. APHIS, 9 CFR 113.102):

None.

Agency _____ CFR _____

